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- (72) Inventors; and
- (75) Inventors/Applicants (for US only): THOMPSON, Timothy, C. [US/US]; 4907 Imogene Street, Houston, TX 77096 (US). CHENGHUI, Ren [CN/US]; 6220 Alder Dr., Apt. 4108, Houston, TX 77081 (US). CHENGZHEN,

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(54) Title: RTVP-GLIPR-LIKE COMPOSITIONS AND METHODS FOR THE DETECTION, TREATMENT AND PREVENTION OF PROSTATE CANCER

RTVP-1 and RGL1 $\alpha$ , RGL1 $\beta$  protein compare

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RTVP-1  MRVTLATIAMMVSPVSNYSHTANILFDIENEDFIKDCVRIHMKFRSEVKPTASDMLYMTW
RGL $\alpha$      MALKNKFSLWILGLCLVATSSKIPSTIDPHIDNCIRAHNEWGKVNPPAADMKYMTW
RGL $\beta$      MALKNKFSLWILGLCLVATSSKIPSTIDPHIDNCIRAHNEWGKVNPPAADMKYMTW
RTVP-1  DPALAQIAKAWASNCQFSHTRLKPPHKLHPNFTSLGENIWTGSPVIFSVSSAITNMYDE
RGL $\alpha$      DKGLAKMAKAWANQCKFPHNDCLDKSYKCYAAPFYVGENIWLGGIKSFTPRHAITAWYNE
RGL $\beta$      DKGLAKMAKAWANQCKFPHNDCLDKSYKCYAAPFYVGENIWLGGIKSFTPRHAITAWYNE
RTVP-1  IQDYDFKTRICKKVCCHTQVVMADSYKVCQAVQPCPKVSGFDALSNGAHFICNTGPGGN
RGL $\alpha$      TQFYDFDLSLCSRVCGHTTQLVMANSFYVGCVAVMCPNLGG---ASTALPVCNTGPGAGN
RGL $\beta$      TQFYDFDLSLCSRVCGHTTQLVMANSFYVGCVAVMCPNLGG---ASTALPVCNTGPGAGN
RTVP-1  YPIW-PYKRGATCSACPNNDKCLDNLG-----VNRQRDQVK-RYTSVYV
RGL $\alpha$      FANNPPYVRGESCILCSKEKCVKNLCK-----NPFLLKPTGRAPQQTAFNPFSLGF
RGL $\beta$      FANNPPYVRGESCILCSKEKCVKNLCTPQLIIPNPNFLLKPTGRAPQQTAFNPFSLGF
RTVP     FGMPIYPRNRYTSLPLIVNSVILILSVIITILVQLKYPNLVLLD
RGL $\alpha$      LLLRIP (SEQ ID NO: 2)
RGL $\beta$      LLLRIP (SEQ ID NO: 4)

signal peptide      MQVILAVIVM
SCP-domain (sig1, sig2)  VCGHYFQVVMAD
Caveolin binding site  YHSTQYTFD
TM-domain           YTSFLIVNSVILILSVIITILV
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(57) Abstract: The invention is directed to purified and isolated novel RGL polypeptides, the nucleic acids encoding such polypeptides, processes for production of recombinant forms of such polypeptides, antibodies generated against these polypeptides, fragmented peptides derived from these polypeptides, and the uses of the above.

WO 2004/111200 A2



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WO 2004/111200 A3